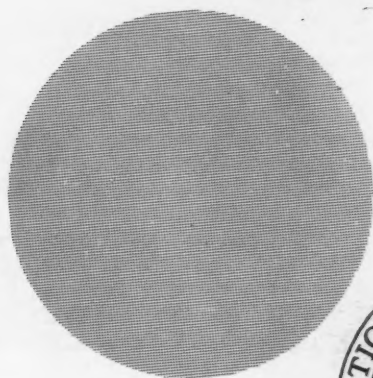


VOL. 4 No. 4
SEPT-OCT 1958

the
**CAMERA
CRAFTSMAN**



NCRS
wins
accreditation

Book Shop

Here are useful additions to your library of technical material. This department will regularly offer suggestions for new books you may wish to acquire. Any reference books, whether or not here listed, photographic or otherwise, will be located for you and may be purchased thru NCRS Supply Department.

FLASH! ULTRA HIGH SPEED PHOTOGRAPHY By H. Edgerton and J. Killian	\$6.50
PHOTOGRAPHIC OPTICS Arthur Cox	5.75
PHOTOGRAPHIC OPTICS Allen R. Greenwood	6.00
PRINCIPLES OF OPTICS Hardy and Perrin	9.50
YOUR CAMERA LENS AND SHUTTER G. L. Wakefield	4.95
CAMERA REPAIRMAN'S HANDBOOK	5.95
HOW TO ORGANIZE AND OPERATE PHOTOGRAPHIC SERVICE DEPARTMENTS	.50
PROFESSIONAL EQUIPMENT; USE, MAINTENANCE, AND REPAIR OF	.50
CAMERAS: THE FACTS W. D. Emanuel and Andrew Matheson	3.00
KODAK REFERENCE HANDBOOKS	ea 4.00
MINIATURE AND PRECISION CAMERAS S. J. Lipinsky	7.95
DICTIONARY OF PHOTOGRAPHY A. L. M. Sweeney	10.00
PHOTO DICTIONARY Morgan & Morgan	3.50
FOCAL ENCYCLOPEDIA OF PHOTOGRAPHY	20.00
SUCCESSFUL SELLING OF CAMERAS AND ACCESSORIES D. Langer	2.95
KODAK GRAPHIC ARTS HANDBOOK	6.50
PHOTO-LAB INDEX Henry M. Lester and John S. Carroll	19.95
THEORY OF THE PHOTOGRAPHIC PROCESS C. E. K. Moss	21.50

THE CAMERA CRAFTSMAN

Published for students,
Vol. 4 graduates and friends of the
No. 4 National Camera Repair School
SEPT.-OCT. 1958

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THIS MONTH'S COVER:

GREAT news and a new format.
We think it looks "cleaner" and
"younger". Hope you approve.

STAFF

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WILLIAM HAGERDORNPRODUCTION MANAGER

The Director's Viewpoint

By SAMUEL L. LOVE



The role of the craftsman in pacing the advance of science has long been recognized. When Thomas Edison produced the first practical incandescent lamp, he was quick to give credit to the tireless efforts of his technical coworkers. These skilled men provided the hands to test combination after combination of materials and conditions that finally produced the wanted results. Mr. Edison often described how the many suggestions made by glass-blowers, machinists, and artisans of all kinds helped the research "team" move toward success.

What was true many years ago, although not always so recognized, is just as true today and becoming more and more obvious. Recently it has been determined that research and progress in many fields requires as many as ten skilled technicians for each engineer and the gap between technician and engineer was never narrower!

Today, it is relatively easy, in time, for a man to move from the ranks of technician to engineer as he acquires experience.

On his first US visit in 22 years, Dr. Ernst Leitz of the German camera and optical firm, stressed these ideas in discussions and talks before American photographic industry leaders. He emphasized the fact that the tremendous demands of scientific research have already outdistanced the capacities of available skilled craftsmen in the most advanced countries.

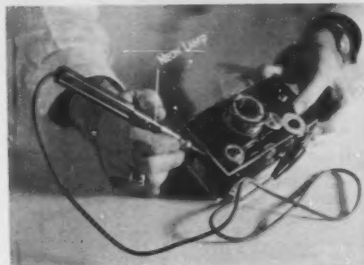
One reason for the rapid technological strides being made by Russia is the recognition, in that country, of these truths. A continuing and expanding effort to train technicians in volume is routine there.

In few countries is Dr. Leitz' observation more apparent than here in the United States, and in few fields can it be so clearly seen as in photography. Your skills are needed. But your skills cannot remain static.

Only by growing and learning constantly can you best serve your community, your industry, and the world. Never neglect any opportunity you have to advance in skill. Too often, because of the shortage of skilled workers which prompts a man to choose camera repair as a profession, even a modest amount of ability is enough to permit good earnings. But learning is a part of living. Use your School services and facilities to grow ever more capable in the field of your choice.

CIRCUITRACER

A small dependable rugged tester



• • •

An easy to use, inexpensive electric circuit tester especially adaptable for camera repair work. It is capable of locating and identifying dead or live circuits of any voltage, fast.

- Checks electric photo-flash circuits
- Analyzes breaks and high resistance joints
- Tests flash wiring for breaks or bad connections

Put this handy unit into your carryout case or pocket for quick tests anywhere. Tested and approved for camera repair by "National ServiShops"

\$4.50

ServiShops Product

National Camera Repair School
Englewood, Colo., U.S.A.



You will work better when you see better with this new Binocular Magnifier. May be worn with or without eyeglasses. Leaves both hands free to work. Fine tolerance and precision work can be done easier, faster and more accurately using this equipment. With the Magni-Focuser you see an object in third dimension greatly magnified - with depth and clarity. It reduces eye-strain and prevents squinting - thereby saving time, increasing accuracy and minimizing the chance of errors and accidents. The head-band is adjustable for your comfort. Normal vision may be resumed by slightly raising your hand.

Model No.	2	magnifies 1-1/2 times at 20"	Price	\$10.50
	3	1-3/4 " 14"		10.50
	7	2-3/4 " 8"		10.50
	10	3-1/2 " 4"		12.50

No 13 and 17 are the same as No 3 and 7 with an auxiliary lens attachment which gives magnification of 4-1/4 and 5-1/4 respectively, with the right eye only. Priced \$15.00 each.

A ServiShops Product

National Camera Repair School
Englewood, Colo. - U.S.A.

Use Kimwipes
on your Camera bench...

SAFE!
SOFT!
CLEAN!
DISPOSABLE!
NON ABRASIVE!

3 x 9" Wipes
340 wipes per container

Kimwipes special design captures grit and dirt in the crepe packets to protect such highly polished surfaces as camera lenses and binoculars.

4 Boxes...\$1.35
12 Boxes...\$3.45

Postage paid with cash orders.



engineering vocabulary

- 1 IT IS IN THE PROCESS - so wrapped up in red tape that the situation is almost hopeless.
- 2 WE WILL LOOK INTO IT - by the time the wheel makes a full turn, we assume you will have forgotten about it too.
- 3 A PROGRAM - any assignment that cannot be completed by one telephone call.
- 4 EXPEDITE - to confound confusion with commotion.
- 5 CHANNELS - the trail left by interoffice memos.
- 6 CO-ORDINATOR - the guy who has a desk between two expeditors.
- 7 CONSULTANT (OR EXPERT) - any ordinary guy more than 50 miles from home.
- 8 TO ACTIVATE - to make carbons and add more names to the memo.
- 9 TO IMPLEMENT A PROGRAM - hire more people and expand the office.
- 10 UNDER CONSIDERATION - never heard of it (or we are looking in the files for it)
- 11 A MEETING - a mass mulling by masterminds.
- 12 A CONFERENCE - a place where conversation is substituted for the dreariness of labor and the loneliness of thought.
- 13 TO NEGOTIATE - to seek a meeting of the minds without a knocking together of the heads.
- 14 RE-ORIENTATION - getting used to working again.
- 15 RELIABLE SOURCE - the guy you just met
- 16 INFORMED SOURCE - the guy who told the guy you just met.
- 17 UNIMPEACHABLE SOURCE - the guy who originally started the rumor.
- 18 A CLARIFICATION - to fill in the background with so many details that the foreground goes underground.
- 19 WE ARE MAKING A SURVEY - we need more time to think of an answer.
- 20 NOTE AND INITIAL - let's spread the responsibility for this.
- 21 LET'S GET TOGETHER ON THIS - I'm assuming you're as confused as I am.
- 22 SEE MR. OR LET'S DISCUSS IT - come down to my office, I'm lonesome.
- 23 GIVE US THE BENEFIT OF YOUR PRESENT THINKING - we'll listen to what you have to say as long as it doesn't interfere with what we've already decided to do.
- 24 WILL ADVISE YOU IN DUE COURSE - if we can figure it out, we'll let you know.
- 25 TO GIVE SOMEONE THE PICTURE - a long, confused and inaccurate statement to a newcomer.

Reports FROM THE CRAFTSMEN

We have been visited in our new repair department by none other than the City Commissioners and His Honor the Mayor, the Editor of the local papers and many others that we invited in to see this new Department. We keep it well cluttered with torn-down cameras and lathe cuttings, indication of the "vast amount of work we do."

I surely wish to express again my thought that developing this added department to my regular photography work was indeed an inspiration for needed attraction and income to my business. If we keep expanding thruout the summer as we are now it will be necessary to put on additional help this fall to keep up with the work, and so I can spend more time repairing.

Thank you again for a fine course.

Harold W. Adams
Star Lane Studio & Camera
Shop, Rexburg, Idaho

My accounts are getting larger every day. I now have 20 accounts which send me work.

Allen T. Eichhorn
Sioux City, Iowa

I bought a local studio March 1, and have been quite busy. I am the only repairman in the area for a radius of 75 miles. Do repairs, sell cameras and operate photo studio. Have one full-time man and part-time girl working for me. Town has population of 23,000 with drawing of 42,000. So far, business has been pretty good. Hope it stays that way.

Lionel Coulombe
Berlin, New Hampshire

Due to the rapid growth of my repair business this past year we have been forced to add extra help in both my shop and office. My inventory of parts has been boosted to a new high. The number of factory authorizations to service cameras is increasing steadily.

Dota Brown
Encinitas, California

So far I am well pleased with the course and have repaired quite a few cameras. I am doing wholesale work for the local dealer and also repair work for the professional photographer in this area.

Kenyon P. Kirby
Biloxi, Mississippi

(Con't, Page 20)

New TOOL CHESTS

\$15.50

LOCK
Nickel plated
snap type locks



DRAWER SLIDE
Strong compound drawer slide
with positive stop and patented
spring release.

LIFT-OUT TRAY
Will fit at either end of
top drawer. 16 compartments,
each 1-12/16 x 1-12/16 x 7/8, provide
filing space for small items.



Combining all of the convenience of a tool or die makers chest plus ease in carrying, number 2020 presents a new concept in hand carried tool boxes. The drawer arrangement permits use in restricted area where space does not allow the opening of more conventional type boxes. Especially useful for the service mechanic. Suitable for the home workshop. Finished in dark brown baked enamel with contrasting tan on drawers.

STYLE NO.	DIMENSIONS		
	L	W.	H.
2020	20	8 1/4	6 1/4
Top Drawer	18 1/2	8	1-15/16
Lower Drawer	18 1/2	8	2-13/16

NET WEIGHT

15 lbs.

**SHIPPING WEIGHT
ONE TO CARTON**

17 lbs.

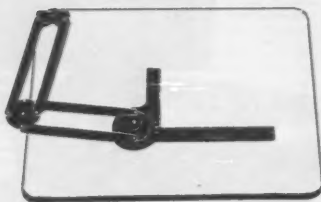
Top drawer has 12 permanent compartments
2 1/2 x 2 x 7/8 plus 2 removable partitions.

A **ServiShops** Product

National Camera Repair School
Englewood, Calif. U.S.A.

draftette

a portable drafting instrument
made of sturdy anodized aluminum
designed for: **sketching**
drawing
drafting, etc.



PRICE
ONLY **\$4.95**

Instrument only...

Complete with 10x13" drawing board \$5.95

Complete with 11x17" drawing board \$6.50

check these features ✓

- 1 **QUALITY** — All stainless construction — available in jet black — mounted with glazing, white-lined numbers and letters.
- 2 **ECONOMY** — Costs much less than other drafting machines — you can afford one for home, use for office, shop, school or field.
- 3 **PRECISION** — An scales machine calibrated to $\pm .0005$ of an inch — scientifically engineered to retain its original accuracy with 180 degree protractor.
- 4 **RUGGEDNESS** — Not a gadget — draftette is a sturdily constructed instrument that will withstand hard normal use indefinitely.
- 5 **COMPACTNESS** — Draftette (without board) folds like a jackknife... slips into drawer, pocket or briefcase. Draftette instrument complete with Draftette board also fits into briefcase, ready for use anytime, anywhere.

A ServiShops Product

National Camera Repair School
Englewood, Colo., U.S.A.

For Further Analysis!



Here's an interesting shot of a ServiShops Analyzer that arrived with this note from Eldon Hanson of Camera Repair Service, Inc., in Milwaukee:

"Meet our new assistant (name withheld-classified). Business got so good after installing our Motion Analyzer that we found it necessary to install this very good looking addition to our organization. Working conditions have been improved infinitely, but it is difficult to say whether or not we accomplish any more work.

Now, if you don't believe the story in the first paragraph, here is an alternate. (We were invited to attend the Photo Dealers' meeting in Milwaukee and to bring the Analyzer along to give free synch checks to all guests present. As an added incentive to assure good attendance they hired a bevy of models to pose for anyone present with cameras. This little girl very obligingly consented to pose with my Analyzer and a gentleman with a 4 x 5 did the photography for me. The idea was born of the express desire to send you a gimmick." (Thank you, Eldon, Miss Millie looks real good, even with part of her "face" covered. Ed.)

This ServiShops

BUSINESS . . .

By Clair Schmitt



TWO KEYS TO SUCCESS

Two of the most important habits that should be formed in repairing photographic equipment are perhaps the most difficult to acquire.

The first one is to spend enough time just looking at an assembly to fully understand the reason for, and operation of, each and every part. The second is to be certain that each part assembled operates freely and properly at the time that it is assembled and that the previously assembled parts still operate correctly after another part is installed.

The lack of these two fundamental practices is evident in nearly every instance where help is needed with a repair or a lesson assignment involving the dis-assembly of equipment. It seems to be the old story of "Haste Makes Waste".

For example, a between-the-lens shutter is disassembled but problems arise in re-assembly because the proper position of the parts is not known. If the reason for, and operation of, each part is fully understood before dis-assembly is begun, the proper position could be determined easily. In other cases the part is assembled in its proper place, but no attempt is made to move it (with the aid of tweezers or the action of other parts) and it is not until the shutter is completely re-assembled, found to be sticking open, and dis-assembled again, that a burr is found on the mounting post of this part that prevents it from moving freely. Sometimes parts that move sluggishly are allowed to pass a brief inspection with the thought that under all the spring tension of the other related parts this little binding won't have much effect. This is a time waster also because even slight binding in a lever can be multiplied many times in the action of other parts and cause real trouble in the final assembly.

If a mechanism is understood at the outset, there is little chance that there will be any doubt as to the proper positions of the parts in their re-assembly. The time that is spent "just looking" can amount to far less than the time spent later, "guessing" where the parts belong.

(Con't. Page 10)



\$8.78



Model V-32

MADE FOR STORING SMALL PARTS

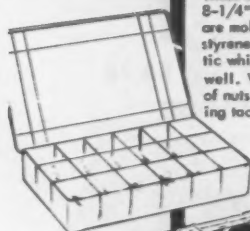
You will be delighted with the beauty, durability and compactness of HAZ-BIN STORAGE CABINETS and the way they will save you time, simplify your inventory, save space and enhance the appearance of your shop, factory, home, office, display counter, etc. Contents fully visible, dustproof, and orderly indexed. No other cabinet built has so many desirable features. No other cabinet is so reasonable in price.

All models safely shipped in floating type cartons, fully assembled, and ready-to-use. Price includes complete set of drawer front labels, drawer dividers, and rubber feet. If not completely satisfied, simply return in 10 days without explanation for full refund.

ServiShops Product

National Camera Repair School
Englewood, Colo., U.S.A.

Handy PLASTIC BOXES



These crystal-clear boxes, 8-1/4" x 4-1/4" x 1-1/4" are molded of clear polystyrene, a light hard plastic which retains its polish well. Very handy for storage of nuts, bolts and even fishing tackle.



A.



B.

Please designate type desired.

3 for \$2.00
75¢ each

MODEL '00

arbor press

Designed for light production and assembly work, this model has large opening in base for arbor work and is equipped with a slotted tableplate.

Presses up to 1 ton.



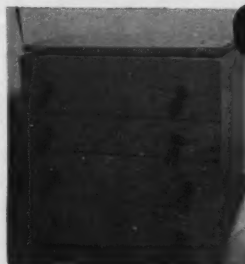
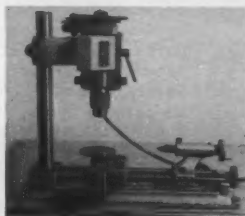
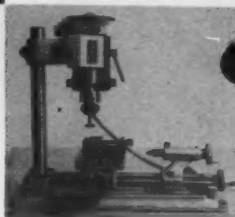
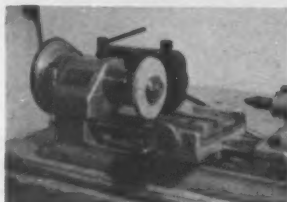
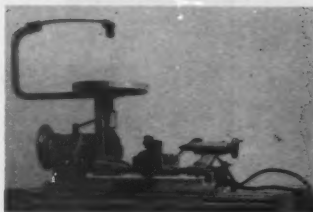
Price f.o.b. Denver **\$26.00**



FOCAL ENCYCLOPEDIA OF PHOTOGRAPHY

Covers completely the entire technology of photography and follows up all its uses for picture making. A master reference work that belongs in every library. Bound in burgundy Buckram with stamped spine and title. 1,460 pages, 2,000 articles on every aspect of photography, 400 photographs and 1,500 pictorial diagrams. Written by 197 experts from 23 countries. A photo library in one volume. 9-3/4 x 6-7/8. **\$20.00**

Miniature Machine Shop



Here is how Ed Zamosky of Detroit, Michigan, set up his "Unimat". All of the attachments are stored in the cabinet and can easily be mounted on top for use. The "Shop" includes lathe, milling machine, grinder, bench saw, drill press and a jig saw. The Unimat is available through NCRS Supply.

SHOP SHOTS

HERE'S WHERE SERVISHOP CRAFTSMEN LEARN AND EARN
Made a change in your shop lately? Make a quick picture
or two and send them in. Share your ideas.



Norman Padria
Holly Hill, Florida



Paul Quist
Gridley, California



Walter Timmers
Ravena, New York



Wilbur Ruth
Arcadia, California

Mathew J. Duniphan
Tulsa, Oklahoma



Donald Tiller
Richmond, Virginia





Now packaged in convenient 7 cc applicator guns, NCRS Supply has two of the finest instrument lubricants available. Use All-Temp Lube for sliding levers and similar friction points. Use Moly Lube on motion picture camera springs.

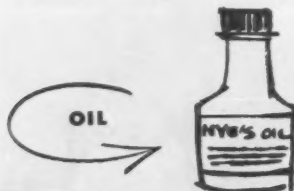
All-Temp Lube _____ .60
Moly Lube _____ .70



SHINO Polishing Cloths

Two cloths - one with jewelers' rouge, the other for final polishing. Comes in cardboard box.

11-1/2" x 14" size. Each _____ .75



Non-corrosive, resistant to temperature change, this Porpoise Jaw oil product stays at the point of lubrication.

3/8 oz. bottle _____ .75

TWO KEYS TO SUCCESS (cont'd)

When each part is tested and made to operate correctly as it is assembled there can be no doubt, after the assembly is complete, that the mechanism will operate as it should.

Nearly every repairman will develop these habits over a period of time because they can be forceably brought to mind when he fails to use them. However, he may lose a lot of money and some good customers in the process. To acquire these habits quickly requires a great deal of self-discipline since they seem to be contrary to human nature. But they are time savers and money makers that can easily tip the scales decisively toward success.

NEW CAMERA REPAIR ESTIMATOR

A new idea in camera repair cost estimating has been incorporated into a recent National Camera Repair School pamphlet. The new approach takes the form of a Repair Time Estimator designed to serve equally well, regardless of prevailing prices, location of shop or complexity of the repair job.

With minimum experience in the use of the new Estimator, it is possible to approximate the time required to complete work of virtually any type on any make or model camera. Estimates are in tenths of an hour and the times needed for various operations are added in order to arrive at the full number of hours required to complete a particular repair.

A separate chart then makes it possible to convert the time-to-complete-a-job into the cost of the repair. The tables are available in any rate per hour to suit the needs of the particular shop or user. The rate table then becomes a part of the new ServiShops Repair Time Estimator.

The new ServiShops Repair Time Estimators are available in quantity, either plain or imprinted with store or shop name. Single copies are free on request to the National Camera Repair School, Box 174C, Englewood, Colorado.

STUDENT BUILDS CIGARET LIGHTER

Ralph Wright, of Gastonia, N.C., recently sent in a clipping of an article about his fancy cigaret lighting machine that was published in a local newspaper. Mr. Wright built this machine in a couple of weeks out of all sorts of odd parts and it is quite a marvelous combination of thought and ability. By pressing a button, gears start turning and levers operating, heating elements glow and an ear syringe is depressed with the end result of a perfectly lighted cigaret lying neatly in a cradle ready to be picked up and smoked. (As a side note Mr. Wright explained that he had to trouble-shoot the photographer's flash equipment before the picture for the article could be taken!)



Dorothy and Betty and



John Price

Lynn Coluppy + family



This was a gay, mad affair! NCRS annual PICNIC!



Sam and Clair dueling!



This is the place



Glen Johnson + his towhead.

Frankie boys.



Frank Curtis



Bill McReedy

John's + Joe's wives.



NATIONAL CAMERA REPAIR SCHOOL is proud to announce its accreditation by the National Home Study Council, which since 1926 has set quality standards for home study schools. Accredited status is granted only upon a thorough examination of the school by a committee of home study experts and subject specialists.

Early last summer, your School staff took the first of a series of steps recently climaxed in the announcement by the Accrediting Commission of the National Home Study Council. This distinguished group has recognized National Camera Repair School as being worthy of this new status. Your School is happy to have received such recognition for it verifies the National Camera Repair School's thorough training policies and identifies it as being among the finest in the home-study field.

The process began with a long, soul-searching look at ourselves! In a many-paged report (it ended as a book almost an inch thick) submitted to the Accrediting Commission, details of the School's operation were presented for examination. Meanwhile, all of the School's training materials were being studied by independent experts in the fields of photography and camera repair.

Later, a group including both educational and industry experts visited the School. This Examining Committee investigated every phase of the School's operation. Its members prepared their own report of recommendations to the NHSC Accrediting Commission. The Commission, composed of eminent and capable educational leaders, officially certified that NCRS fulfills their very rigid requirements. Having met these educational, ethical and business standards, the staff of the National Camera Repair School is justifiably proud. You, as students of NCRS, may be equally so.

The Accrediting Commission

An Accrediting Commission, appointed by the NHSC Board of Trustees, administers the program and accredits home study schools. Members of the Commission are:

William Bethke, Vice-President, LaSalle Extension University, Chairman
Herold C. Hunt, Eliot Professor of Education, Harvard University, Vice-Chairman
Earl L. Bedell, Director, Vocational Education, Detroit Public Schools

Edward C. Estabrooke, Educational Director and Secretary, American School and American Technical Society

William A. Rogers, Vice-President, International Accounts Society, Inc.

W. Lane Schulze, Director, Chicago School of Nursing

Jack C. Staehle, Vice-President, Operations-Industrial Relations, Aldens, Inc.

John W. Studebaker, Chairman, Editorial Board, Scholastic Magazines, and U. S. Commissioner of Education, 1934-48

John C. Villame, Vice-President and Dean of Faculties, International Correspondence Schools

NCRS is accredited by the NATIONAL HOME STUDY COUNCIL



W. Lane Schulze



Frank Koss, Heiland

Helen Allie





THE NATIONAL HOME STUDY COUNCIL

The National Home Study Council is a voluntary organization of private home study schools. Its purpose is to promote sound educational standards and ethical business practices within the home study field.

Over thirty years ago, under the stimulation of a Carnegie Corporation study and the National Better Business Bureau, several well-established correspondence schools recognized the need for standards and self-discipline within the field. In 1926 they organized the Council and established educational and ethical standards which have been raised repeatedly.

ACCREDITATION

The NHSC is primarily a public service organization. It sets standards, identifies schools meeting those standards, and informs the public about them.

The Council cooperates with national and state agencies in keeping them informed about the opportunities to develop trained manpower through home study. The NHSC works to keep the doors of educational opportunity and occupational advancement open to all.

Four years ago the Council decided that further improvement could be made in its standards and procedures for examining home study schools. After much study and consultation with leading educational authorities, the Council developed and adopted a new accreditation program. The basic plan is similar to that of other modern accrediting associations.

Accreditation is a voluntary matter. Any private home study school five or more years old can apply. It need not be a member of the NHSC although upon accreditation it automatically becomes a member.

NHSC accreditation means that competent judges vouch for the quality of a school. An accredited school is a first-rate school; it offers sound instruction and is reliable. Inasmuch as most home study schools are adult education institutions, they usually do not offer college credit or degrees.



SERVICE TO SCHOOLS

The Council serves the public by encouraging improvement among all home study schools. It is constantly helping both member and non-member schools to upgrade the quality of their services. Through consultation, conferences, committee visits, workshops, research, and publications the Council helps schools desiring to meet the standards required by the NHSC to do so.

The Council disciplines its own members. On occasion it expels schools which fail to maintain the required standards.

The Council cooperates with the Federal Trade Commission, the Post Office Department, State Education Departments, State Legislatures, Better Business Bureaus, and other official and voluntary bodies to encourage all home study schools to operate ethically. Without stifling institutional freedom, the Council is active in helping curb and eliminate unfair exploitation of ambitious people by unscrupulous home study schools.

MEANING OF ACCREDITATION



The Commission works as an independent body. Its judgment about any school is final and cannot be overruled.

The first *List of Accredited Home Study Schools* under the new program was issued on September 1, 1956. It is expected that all NHSC members and other qualified schools will be accredited by 1960. New *Lists* will be issued annually. A copy of the latest *List* will be sent on request. A detailed explanation of accreditation for professional educators is also available.

• For over thirty years the National Home Study Council has been the standard-setting agency for private home study schools. The Council has progressively raised its standards. Recently it developed an accrediting program using procedures similar to those of other educational accrediting associations.

Accreditation means that each school listed meets the following standards:

- It has a competent faculty.
- It offers educationally sound and up-to-date courses.
- It admits only qualified students.
- It provides satisfactory educational services.
- It has demonstrated ample student success and satisfaction.
- Its tuition charges are reasonable.
- It truthfully advertises its courses.
- It is financially able to deliver a high quality of educational service.

BASIS OF ACCREDITATION

The NHSC accrediting process requires four steps:

1. The school makes a thorough study of its own operation, its purposes and programs, and assembles pertinent data for examination.
2. Qualified subject specialists review the instructional materials for completeness, authenticity, and up-to-dateness.
3. An Examining Committee visits the school and thoroughly studies its entire operation. The Committee ordinarily consists of three to five people—a specialist in home study education, one familiar with business management, and one or more subject-matter specialists from outside the home study field.
4. An Accrediting Commission reviews all pertinent data, serves as a judicial body, and decides whether or not the school satisfactorily meets the required standards. Each school is judged in light of its own announced objectives.





Mr. and Mrs. Martin Shedd
Eugene, Oregon



Mr. Lloyd Bazant
Crete, Nebraska



Mr. Glenn Graves
Salinas, California



Mr. and Mrs. Chester Crumrine
South Bend, Indiana and Edward Ball,
a relative living in Denver.



Mr. and Mrs. Delbert Reed
Skokie, Illinois

VISITING STUDENTS

These folks dropped in to visit the School while on vacation. Let's see more of you next year! Not pictured here are Ed Szczepanik of Tullahoma, Tennessee, and Mr. Horton Shull of Dighton, Kansas.



Mr. and Mrs. Doyce Croy
Comanche, Oklahoma



Maurice Gonder
Manitoba, Canada



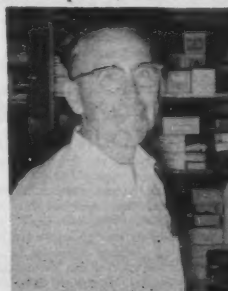
Mr. and Mrs. William Glasgow
Tucson, Arizona



Mr. and Mrs. Jesse Sansom
St. Louis, Missouri



Mr. J. L. Stites
Pocatello, Idaho



Mr. Russell King
Minneapolis, Minnesota

SPIRAL SPRING BELTING

Furnished in 3 test lengths complete with coupling. Runs smooth and noiseless.



Each \$8.50

PLASTIC FUSIBLE BELTING

Ends fuse when heated to form endless belt.



$\frac{3}{8}$ " diam.—Per Ft. \$8.15
 $\frac{1}{2}$ " diam.—Per Ft. .15
 $\frac{3}{4}$ " diam.—Per Ft. .15

RUST REMOVER

4 oz. bottle — \$1.70



H-R Rust Remover is non-acid, absolutely harmless to the polished finish of fine parts. You may leave parts in this rust remover overnight. You may dip parts directly into the wide mouth 4 oz. bottle.



HARD ARKANSAS MOUNTED STONES

Length	Width	Each
$3\frac{1}{4}$ "	1"	\$3.00
4"	$1\frac{1}{2}$ "	7.50
5"	$1\frac{3}{4}$ "	9.00
6"	1 $\frac{3}{4}$ "	10.50

HARD PERMANENT PIECES
 (Approx. $\frac{1}{2}$ the thickness of regular stones)

1.50

SERVISHOPS HEADQUARTERS ARE YOUR SPECIALISTS

ServiShops Headquarters advertising is beginning to appear in National magazines. Rely on your Headquarter Shops to back up your own work. For example, electronic specialists and complete facilities here can take care of your repairs on sound equipment, electronic flash and other specialized photographic machinery.

Send repairs direct to ServiShops Headquarters, Box 174ER, Englewood, Colorado.



*Yours Truly
 Delphine*

HI THERE ----

Well it's that time again so here I am. You know, I was beginning to wonder if I was ever going to get enough time to write this month's column. If there was any possible way for me to describe to you how busy we have been here for the last 3 or 4 months, I would. We have been so-o-o-h busy that many of us spend more hot summer hours here than the usual 40! We're kinda funny gadgets around here. we run instead of walk -- except for old Jock, that is, he swings from person to person. He thinks he has to be different. Ha!

I do think we have the most wonderful people for our students. This seems like discrimination ---- maybe there are other wonderful people too. But surely our students are tops! I'd like to tell you about the Coffey's. O. K.?

Mr. Coffey (Max), who has been Fire Marshall in Harlingen, Texas, for several years, and is now enrolled in NCRS, has a charming wife and sweet 10 year old daughter. This spring Mrs. Coffey, (Mickee) was not feeling well, and after many and continuing investigations, they found that she has Multiple Sclerosis. Did this terrible news get them down? Nope, not the Coffey's. With a bravery that is almost beyond imagination, they proceed with everyday affairs. While Max was out of town on business, Mickee and Terry Lynn made a complete layette for Jocko! Two little jackets, a little cap, a nightie, some rompers --- more clothes than Jocko will wear out for quite a while. Terry Lynn wrote such a darling letter to Jocko and he's so proud of it that he asked me if I wouldn't let him share it with the rest of you.

"DEAR JOCKO:

"I am 10 years old. I helped my mommy make your clothes. We are not sure they will fit, because we did not know how big you are. We hope they help keep you warm and well. I am sure it must get very cold there. I wish you could spend the winters here in the South with us where it is always warm. Would you please send me a larger picture of yourself?"

DEAR TERRY LYNN:

Delphine wants a picture of me (large size) to
 (Con't, Page 18)

Our Students Speak



Thank you for the service I have received from the Supply Department, and the way the School and Supply Department look after your students. I am very happy with my camera repair course and everything about it. Will be glad when I can give it all my time.

Gerald C. Ollis
Inglewood, California

This is to inform you that I have received my Motion Analyzer and other equipment safely. I cannot wait any longer to let you know how pleased I am.

George Sulker
Aruba, Nederlands Antilles

I am enjoying the course very much and look forward to understanding and completing each new lesson.

Dolph Hendrickson
Denver, Colorado

PLEASE thank the powers that be for buying some typewriters for the instructors etc.

I appreciate their haste in getting off replies, probably working far into the night to do so, but now those replies take much less time to "translate!"

"Anonymous"

One of our local camera shops, on learning that I am taking this course, has asked me that as soon as I feel ready to do this work on a part-time basis, he would be glad to have me work in his shop. It seems that he is swamped with work and needs all the help he can get.

I see this as an opportunity for valuable experience, thanks to NCRS.

John Ragazzo
Boston, Massachusetts

This lesson (Estimating Repair Charges) has facts I agree with 100%. Congratulations on a good lesson.

O. J. Hebrank
Topeka, Kansas

AEROTRONIC INSTRUMENTS ON CONSIGNMENT

Model 103 Shutter Speed Tester used 2 months	\$85.00
Model 303 Movie Speed Tester latest model, used 2 months	55.00
Model 303 Movie Speed Tester	50.00
Older Movie Speed Tester	30.00

Only one of a kind. First come first served.
See ad on Page 17.

SPECIAL TOOLS FOR YOUR SHOP



K&D DEMAGNETIZER

Double Form Var coil with aluminum cover, switch, four foot cord and detachable plug. For 110 volt A.C. current only. Base 3 1/4" x 2 1/4".

Each \$4.75



DEMAGNETIZER

Economical model. For 110 volt A.C. current.

Each \$4.50

OILERS

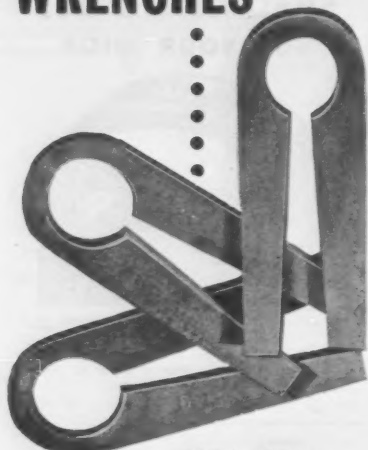


Simply press Lubrityl's point against spot to be oiled—oil is ejected under pressure enabling you to apply oil in hard-to-reach places. When pressure is released, excess oil is automatically sucked back into cartridge, giving you perfect control for every oiling need. Leakproof, easy to fill, easy to clean—complete with protective cap.

\$1.00

Nat Line:
Flexi-Clamp

WRENCHES



T 751-12P \$3.50 ea.

THESE WRENCHES are very effective tools for removing Lens and Retaining Rings that do not have built in Spanner Slots. You will not mar fine finishes or damage delicate lens mounts when you have a set of these wrenches in your kit. Available for any size diameter job. SIZES IN STOCK to fit:
EASTMAN KODAK LENS CELLS
POLAROID LENS CELLS
LEICA View and Rangefinder caps
OTHER sizes available on request
PLEASE state size or purpose required when ordering.

Popular sizes: 7/16, 1/2, 21/32, 3/4, 1-1/8, 1-1/4, 1-1/2, 1-3/4

A ServiShops Product

National Camera Repair School
Englewood, Colo., U.S.A.

Delphine (con't)

send ya, wearing your clothes and eating a piece of salt water taffy sent to me by Homer Littleton, of Berlin, Maryland. The problem is that I have been sick. Shhhh -- the tummy flu! I would like to see you, Terry Lynn. I would pull your hair! Send me a picture of you. (X) "Jocko"

Well it's time to close for now and God B'ess and keep each and everyone of you.

Bye for now

Delphine & Jocko

A CALENDAR FOR REPAIR SHOPS

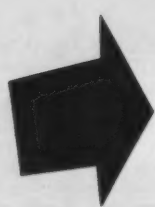
Sat	Fri	Thu	Wed	Tue	Mon
8	7	6	5	4	3
16	15	14	13	12	11
23	22	21	20	19	18
31	30	29	28	27	26
38	37	36	35	34	33

A new calendar has been proposed that may be a solution to many of the problems in a camera repair shop. It is proposed that our present-day calendar be revised for current use. Write to your congressman today!

Here is what the proposed calendar will do for the repair shop and its customers: 1. Every job is a Rush. Every one wants his camera fixed yesterday. With this calendar, a customer can bring his camera to the shop on the 7th and pick it up on the 3rd. 2. All customers want their cameras on Friday so they can use them on the weekend. So there are two Fridays in every week. 3. There are seven extra days at the end of the month to take care of work that didn't quite get finished. 4. There will be no 1st of the month bills to be paid, for there isn't any 1st. The 10th and 25th also have been omitted in case you have been asked to pay yours on one of those days. 5. There are no bothersome non-productive Sundays that your family insist you spend with them.

NEW CRAFTSMEN

Lawrence Lee, 6 lbs, 6-1/2 oz, born July 27, 1958 to Mrs. and Mr. Larry Papke, Levittown, Pa.
Barbara Elaine, 5 lbs, 11 oz, born May 9, 1958 to Mrs. and Mr. Chester Bruszewski, Delano, Cal
Baby born to Mrs. and Mr. Tom Watson, Heber City, Utah. No other details known



KITSKITSKITS

**YOU'VE ASKED FOR
THEM AND HERE
THEY ARE...**

$\frac{1}{4}$ Price!



Your

TRANS-RAK

Costs you only

\$1.00 with any

KIT order totaling

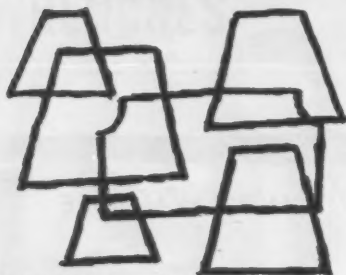
\$20.00 or more!



KITS NOW AVAILABLE

*RIVET ASSORTMENT	\$7.50
*WIND ASSEMBLY ASSORTMENTS	
For Box Camera	\$6.95
For Popular Priced Folding Camera	\$6.95
*SYNCH INSTALLATION KITS	
External (Connectors, Insulators, etc.)	\$9.75
Internal (Replacement Parts, contact material, etc.)	\$15.50
*SHUTTER BLADE ASSORTMENT	\$6.95
FLASHCORD ASSORTMENT (6 cords)	\$9.90
SPEING WIRE KIT	
3' each of sizes .011, .012, .018, .020, .022	
6" each of sizes .040 and .050	\$1.00
BELLOWS KITS WHILE THEY LAST	
15 Bellows in popular US sizes	\$16.45
10 Bellows in popular US sizes	\$ 9.45
METRIC SCREW ASSORTMENT (400 pieces)	\$7.50
MIRROR ASSORTMENT (6)	\$5.95

NEW
mirror
ASSORTMENT



CONTAINS 6 OF THE
MOST FREQUENTLY USED MIRRORS
FOR ROLLEI, GRAFLEX,
AND EXAKTA CAMERAS



**SPECIAL SUBSCRIPTION
RATES FOR STUDENTS**

"Photographic Trade News"
"Photo Dealer"

Regular 1 year Subscription
\$3.00 each for only \$2.25*

ORDER THEM NOW!

Also available at student rates*
"Modern Photography"
"Popular Photography"
"U.S. Camera"

* U.S. and Possessions only

(Reports, Con't)

My repair business is doing much better now -- I finally have a large club with which I guard the door. This is a very strange situation, having to work hard and turning business away or at least trying to regulate it to eliminate rush peaks. It got out of hand for a while, I found myself swamped, but I believe that I am now in control, at least temporarily. The business is paying its way, and at this stage of the game that is all I am interested in.

Ed Heckinger
Waukesha, Wisconsin

I have been gone almost 39 days and am running behind on my lessons, but I wanted you to know that since I came back I have had two dealers asking me to do their repair. I brought home a bushel basket full tonight and that's no joke. Since I started with NCRS I have had enough business to more than pay my tuition, in fact we made the trip to Chicago on part of what we have earned already and I still have some outstanding collections to make.

Max Coffey
Harlingen, Texas

SMALL 100 WATT LAMP

The Photo Lamp Division of General Electric recently announced a 100 watt lamp that is only 6-3/4 inches in overall length and 3/8 inch in diameter. Cylindrical terminal caps make positive electrical contact in standard holders like those used with ordinary small cartridge fuses. This new design provides a high-brightness source of good uniformity for use in diffusion-type reproduction systems such as enlargers and film or paper printers. When these lamps are used normally, i.e. behind a plate of diffusion glass, their available brightness is greater than regular systems using standard enlarging lamps.

FOR SALE

L & R Cleaning Machine; Master Model one-quart capacity jars. Variable speed motor with reversing switch. Complete with two parts baskets. Used, good condition. \$35.00 Postpaid.

Chester M. Bruszewski
810 Tenth Avenue
Delano, California

NEEDED

A ground glass back for a Kodak Ektra. If you have one or know where one might be available, please drop a card to Mr. Joe A. Bailey, Box 2321, Cap Station, Austin 11, Texas



BELLOWS

HAVE WE HEARD
FROM YOU LATELY?

Perhaps our geographic distance has had much to do with my feeling about NCRS. Many times your replies to questions or orders have taken what seemed to me an unreasonable length of time. Replies have been incomplete and therefore require another round of questions. Please consider that these questions are from a student who is not versed in the phraseology of asking questions in a field in which he knows nothing and his teacher is supposed to know so much.

Please also consider that the student may have nowhere else to turn for help. He may be in the middle of a repair and need a part or some advice in a hurry. Your willingness to help him pronto, and to do just that, may save his career as a repairman.

Prompt replies (negative or positive) to questions or orders, would be appreciated. Be frank and honest. If you can't give a full answer, or supply a part or do a repair, say so at once. The student may then have time to find another source, or at least figure out an answer or excuse for his customer who trusted him to do a job.

Any rebuttal would be appreciated.

Name withheld by request

Dear Mr. --

Thank you for your very interesting comments. Everything you said falls right in with the desires and policy of your School.

Unfortunately, it is true that in actual practice we have often fallen short of such a goal. It is easy to make excuses, but it is also your School policy to continuously seek to improve, rather than try to find reasons for standing still.

I hope that as you continue to use your School services you'll discover that the separation between the ideal goal and actual practice becomes less and less. Certainly every member of the School staff has been inspired many times by students like you, who conscientiously provide constructive criticism that will help us give you the service that you want.

Cordially,
Samuel L. Love, Director

(Con't. Page 23)

RECENT CONSIGNMENTS ACCEPTED ON SERVISHOPS ANALYZERS

There are never any trade-ins accepted on purchases of ServiShops Motion Analyzers. However, it has been NCRS Supply policy to take instruments on consignment. That's good news for those of you who would like to make an especially good "buy" on a used test instrument.

Is there some particular machine in which you are interested? Place a request. When an instrument of the type you want comes in, you'll be told. You can even name the price you'd like to pay, if you wish. The plan makes available shutter testers, synchronization testers, contact testers and others by such manufacturers as Aerotronic, Heiland, Hickok, and NCRS.



Here are the approximate prices you may expect to pay for different makes and models of used test equipment:

Gardner Sychrotimer	\$195 to 275
Heiland SynchroTester	80 " 120
Aerotronic (Synch)	60 " 85
Aerotronic (Shutter)	50 " 75
Rush	50 " 75
Hickok	50 " 75

This also gives you some idea of the amount you will be paid for an instrument you now own, when buying a ServiShops Motion Analyzer.

- PRICED TO FIT
YOUR POCKETBOOK
- DESIGNED BY
EXPERTS
- PLANNED FOR YOU
- BUILT TO GIVE YOU
SERVICE
- TESTED IN SHOPS
LIKE YOURS



YOU CAN TEST PHOTO EQUIPMENT IN A MATTER OF SECONDS

BOOST YOUR EARNINGS IN LESS TIME

Because your Analyzer requires fewer adjustments to make a test, you'll save time and steps on every test you make. You'll actually need up to 50% less time than you'd use on even a single, high cost special purpose instrument. You can go from test to test with no complications - and without worry about calibration or accuracy! Savings of time and an increase in accuracy guarantee you higher earnings. The most expensive thing you own is your own time! Make a shutter or synch adjustment with half the testing time and you double your earning power! Your ServiShops Analyzer means more money for you!

NATIONAL CAMERA REPAIR SCHOOL

ENGLEWOOD,

BOX 174 C

COLORADO

22 THE CAMERA CRAFTSMAN SEPT-OCT 1958

SEND
FOR
FREE
BOOKLET
NOW

Bellows (con't)

Some color photographs taken by a customer with a new camera had no area of critical sharpness. I explained to the customer that I would be very happy to thoroughly examine his camera and rangefinder and asked him to please bring in his negatives because something may have gone wrong between the camera and the prints, and it had; because the color negatives were very sharp. Sharpness lost in reproduction. Photographs returned and negatives re-printed, very sharp. Customer with the new camera, who was very disgusted with it and the store, was very happy with all of us after cooling down and talking it over and receiving his sharply-reproduced color prints.

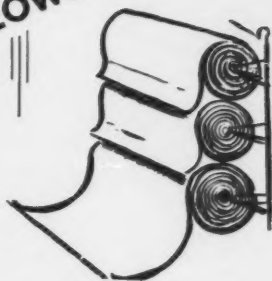
Fred W. Nolting
Waterloo, Iowa

I think it is only fair to you and your camera repair school that I write to you and let you know how I am doing or rather what your course has done for me. I recently informed a camera shop that sends his work to California that I would like to receive his work that I could handle at the present time. He said he had a camera that he received that morning and the shutter was stuck open and if I would like to tackle it I could. I told him I would try and two days later I took it back to him in good working order. He was quite happy to find I could do the work and I could give such fast service. He stated that this kind of service could develop into a profit-making project for both of us.

I receive your magazine "The Camera Craftsman" and look forward to reading it. Your School had a picture of me at my workbench and I would like to see it in your magazine and maybe parts of this letter as I am tickled with my ability to do repair work.


G. W. Keehner
Longview, Washington

BELLOWS MATERIAL



"Outer" 36" wide \$2.20 yard
"Inner" 36" wide \$2.00 yard
Discount: 1 to 4 yards - 20%
5 to 10 yards - 25%

FOCAL PLANE SHUTTER MATERIAL
42" wide \$6.00 yard
Discount: 1 yard - 20%
2 to 4 yards - 30%; 5 to 10 yards - 40%
Minimum Order: 1 yard
Over 10 yards, write for special discount

 Servishops Product

National Camera Repair School
Englewood, Colo., U.S.A.



NATIONAL CAMERA REPAIR SCHOOL

Box 174
Englewood, Colorado

I am interested in the opportunities and advantages of a career in Camera Craftsmanship. Please furnish me with complete information about your training program.


Name _____ Age _____

Street _____

City _____ State _____



If you have a friend or relative who may be interested in the money making opportunities that exist today in the camera repair field, have him or her fill out this coupon and mail it to the National Camera Repair School, Box 174, Englewood, Colorado.



SPEED UP REPAIR TIME
WITH
a supply of FINE METRIC SCREWS and taps

This assortment comprises a selection of lengths, head types and metals calculated for a variety of applications. Only the finest quality screws with cut threads and turned heads are supplied. Appearance, finish and fit are superior to those associated with ordinary rolled thread, struck-up head products.

Short, medium and long lengths are supplied in countersunk and flush head types in both brass and steel. The assortment is packaged in a clear plastic box. Small quantities of nuts and washers are included.

Mixture is varied as to:
LENGTH: (Various in a range from 3/32" to 5/16")
HEAD TYPE: (Flat, Round, Oval and Fillister)
METAL: (Brass and Steel)
SIZES: (Metric Assortment, 400 pieces)
 1.0mm, 1.2mm, 1.4mm, 1.7mm

TAP SIZES:
 1.0mm, 1.2mm, 1.4mm, 1.7mm
\$1.80 ea.

\$7.50 Box

ServShops Product
National Camera Repair School
 Englewood, Colo., U.S.A.

THE CAMERA
CRAFTSMAN *from*

NATIONAL CAMERA REPAIR SCHOOL

Box 174
 Englewood, Colorado

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 Return Postage Guaranteed

